



2024

Jun. ~ Aug.

Extended Until October 31, 2024

NC Helix Drill

Rough Milling | Drilling | Slotting

Only six tools for making Ø13 ~ Ø65mm holes



Two Types Of Shank,
Drilling Depth Up To 8xDc

20°
max.
ramping
angle



Short & small chips



Helical interpolation

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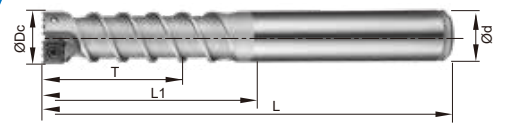
PROMO

BUY **1** HOLDER

GET **2** INSERTS (Same grade)

Free



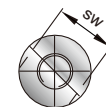
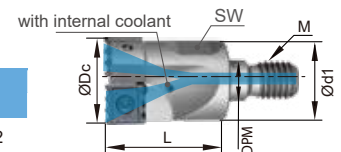



► 99321 Cylindrical shank - External coolant

Code	Parts No.	Type	drill dia. mm		ØDc	T	L1	L	Ød	Insert type
			Dmin.	Dmax.						
401001	00-99321-010-1320	BC10-HD11-1320	13	20	11	30	40	80	10	N9MX04T002
402001	00-99321-012-1525	BC12-HD13-1525	15	25	13	36	50	100	12	N9MX05T103
403001	00-99321-016-2030	BC16-HD17-2030	20	30	17	50	60	110	16	N9MX070204
404001	00-99321-020-2540	BC20-HD22-2540	25	40	22	60	70	125	20	N9MX100306
405001	00-99321-025-3050	BC25-HD27-3050	30	50	27	75	85	165	25	N9MX12T308

► 99323 Screw Fit Cutter - Internal Coolant

Code	Part No.	Type	drill dia. mm		ØDc	L	M	DPM	Ød1	SW	Insert type
			Dmin.	Dmax.							
421001	00-99323-010-1320	M05-HD11-1320	13	20	11	20	M5	5.5	10	8	N9MX04T002
422001	00-99323-012-1525	M06-HD13-1525	15	25	13	25	M6	6.5	12	10	N9MX05T103
423001	00-99323-016-2030	M08-HD17-2030	20	30	17	25	M8	8.5	16	14	N9MX070204
424001	00-99323-020-2540	M10-HD22-2540	25	40	22	30	M10	10.5	20	18	N9MX100306
425001	00-99323-025-3050	M12-HD27-3050	30	50	27	35	M12	12.5	25	23	N9MX12T308



* Use open ended spanner to tighten the cutter.

Brought To You By



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Ref. No: 109-2406-4D



ACE Spot Drill >>>

Spotting Concept!

Spotting produces a shallow hole to get better hole position enabling to produce more accurate final product. Ideally, the proper spotting angle should have larger point angle than that of your drill, so the center of a drill shall be the first point to contact workpiece to avoid the drill walked or moved in starting drilling.

P M K N

- Dual Clamping Screwed Design
- Ensures the vibration free during the cutting

3 Angles: 90° / 120° / 142°

- For 90° point angle drill
- For spotting before drilling by 110° point angle drill
- For spotting before drilling by 135°/142° point angle high performance drill

Excellent Repeatability. No Need Tool Length Re-setting By Insert Type.

High Rigidity, High Performance Cutting, Ultra-long Tool Life.

- Symmetric 2-flute edge design reducing the lateral force.
- Enhance ACE Spot drill rigidity enabling to run high feed rate.
- Double point angle makes the insert tip stronger to probing service life, which results in lower production cost.

1-12 Nine9 Cutting Tool & Tool Holders

i-Center. Center Drill >>>

The "i-Center" is a trademark of Nine9, the developer of the first indexable center drill in the world (Patented) Offering an indexable insert system for the 1st time, Nine9's "i-Center" design improves your process performance.

P M K N

- Cutting flute design same as carbide center drill for high performance speed and feed rate.
- Each insert has 2 cutting edges.

High Speed, High Feed Rate

- The special ground insert and rigid holder design facilitate high performance speed and feed rates. For example, drilling alloy steel at 6000 rpm and feed rate of 600 mm/min. (0.1 mm/rev.)

Excellent Repeatability

- The positioning repeatability of the insert is within 0.02 mm (0.0008") in radial direction, thus ensuring conformity to any national standards.

Easy Tool Length Setting

- The axial position accuracy of the insert is 0.05 mm (0.002"). It is not necessary to reset the tool length when changing the insert to cutting edge.

Extended Tool Life

- Coolant can be supplied through the center of the holder to increase performance and extend tool life.
- Insert geometry, grades and coating process are specifically engineered for centering applications.

Nine9 Cutting Tool & Tool Holders

Chamfer Mill >>>

45° Front And Back Chamfering!

Nine9 chamfer mill is designed for chamfering and countersinking with indexable inserts. The insert is a specifically designed for high speed machining, the multiple flutes provide for increased feed rate, optimizing performance and reducing cutting time.

P M K N H

- Economical
- Each insert has 4 cutting edges.
- Long tool life.

Excellent Repeatability

- Smallest indexable counter sink, diameter 07 mm.
- The insert is dual relief angle, specially edge honing and optimized coated for high cutting speed.
- Optimized the number of teeth on the holder to achieve higher feed rate.

Applications

- For front and back chamfering
- 90° counter sink and 45° chamfering
- For counter sink, circular chamfering, contour chamfering and face milling

Eliminate 2nd Operation Or Deburring Time.

Nine9 Cutting Tool & Tool Holders

Corner Rounding >>>

Type of RC / Radius 0.5 ~ 10mm

Produces smooth and excellent surface finish on workpiece.

P M K N S

- Various Corner Radius Inserts
- Can Fit On Same Holder.

Each Insert Has 2 Or 4 Cutting Edges

- Carbide insert can stand very long tool life.
- Each insert has 2 cutting edges.
- Combination corner rounding and 45° chamfering application on same insert.
- Higher cutting speed and feed rate.
- Very small X offset, good for contour chamfering.
- Utilize standard NC Spot Drill holders 99616-06, 99616-14, 99616-22 & 99616-32.

Example

- Radius 0.5
- Radius 1.0
- Radius 2.0

Nine9 Cutting Tool & Tool Holders

Deburring Mill >>>

60° & 90°

For both front and back deburring and threading applications.

P M K N H

- 2 Angles: 60° / 90°
- One holder can fit on both the 60° and 90° deburring inserts.
- 6 Cutting Flutes
- provide higher feed rate, optimized performance and reduced cycle time.
- 0.5mm

Deburring Mill 60°

- Front & back deburring in one operation.
- Mini, deburring bore from 0.3 - 0.10mm.
- Also for thread milling application.
- Each insert has 6 flutes.
- Thanks for special insert geometry and Nine9 clamping system to provide high precision and accurate position.
- The smallest insert 0.5 can do M1x0.75 internal threading and deburring.
- For external different threading pitch can be done by NC programming.
- For example 0.15mm insert can do external, threading pitch from P1.25 to P2.25mm, save your tool invent.

Deburring Mill 90°

- For front & back deburring, grooving is also possible.
- Mini, deburring bore from 0.3 - 0.10mm.
- Each insert has 6 flutes.

4-80 Nine9 Cutting Tool & Tool Holders

Engraving Tool >>>

30° / 45° / 60° / 90°

This is a revolutionary new concept of engraving tool with indexable carbide insert. Provide HIGH QUALITY ENGRAVING in most kinds of material. Higher speed and feed rate, dramatically reducing your cycle time.

P M K N H S

- No Need To Reset After Changing Insert Or Cutting Edge
- Deburring in one operation.
- Excellent repeatability.

High Positive Rake Angle

- Very sharp edge for shallow engraving.
- Suitable for all types of materials, such as plastic, non-ferrous metal, aluminum, copper, carbon steel and stainless steel.

Multi-Side Grinding

- Full periphery ground insert to ensure efficient repeatability.
- It performs excellently without producing any burrs, especially in copper, aluminum and stainless steel.

High Speed, High Feed Rate

- Designed to run at high speed up to 40,000 r.p.m.
- Feed rate 0.08mm (0.003") rev. apply to aluminum; 0.05mm (0.002") rev. apply to stainless steel.
- Reduces engraving cycle time.

Special forms are available on request.

Nine9 Cutting Tool & Tool Holders

Micro Spot Drill >>>

90° / 120° / 142°

0.1 & 0.2mm

It produces a consistent surface for micro drill successfully to enter the workpiece.

P M K N H

- One Holder Supports The Entire X060 Series Inserts.

Each Insert Has 2 Cutting Edges.

- Micro spot drill geometries are designed to optimize rigidity and accuracy with a point angle to guide micro drill towards the hole's central line.
- Carbide insert can stand very long tool life.
- It produces a consistent surface for micro drill to enter the workpiece especially for round, angled or curved surfaces.

Spotting + Drilling

- Better position accuracy and diameter tolerance.
- Resulted off-center drilling, poor hole quality and reduced tool life.

Nine9 Cutting Tool & Tool Holders

NC Deburring >>>

60° & 90°

Ideal for fine hole deburring.

P M K N

Indexable Type, High Precision Ground Carbide Insert.

- Achieve high speed and high feed deburring and chamfering on CNC machine.
- Retains exceptional positional accuracy of the deburring depth and diameter.

3 Flutes Insert

- Good for diameter angles < 90°
- The chip removing space is bigger

6 Flutes Insert

- Good for simple contours.
- Less deburring time saving

4-78 Nine9 Cutting Tool & Tool Holders

NC Spot Drill >>>

No Need To Choose, Nine9 Does It All!

NC Spot Drill with indexable carbide insert. High efficiency! Long tool life! Cost saving!

P M K N S H

- Various Inserts Can Fit On The Same Tool Holder.
- One Tool For Various Applications.

Spotting Produces Better Hole Position And Geometrically Uniform Holes.

Available Shank Diameters: 05, 06, 08, 010, 012, 016, 020, 025mm, 03/8", 01/2", 05/8", 011/4", 03/4", 01", M5, M6 And M8.

60° / 82° / 90° / 100° / 142° / 145° Angle For Different Applications.

- Suitable for spotting, chamfering, facing, grooving and engraving.
- Each insert has 2 or 4 cutting edges.
- Increase cutting speed with coated carbide inserts.

2-20 Nine9 Cutting Tool & Tool Holders

NineBore >>>

Nine9 offers a range of eccentricity mechanism boring tools which designed to provide stability, accuracy, and productivity in boring operations. These tools are commonly used in industries such as automotive, aerospace, mold and die, and general machining. 99146 can complete rough and finish boring in one operation.

P M K N H

- Easy Adjustment!
- No Backlash!

Easy Handling

- Change the boring bar in just one minute.
- Dimensions are easy to read. They are indicated on the tools and are easily adjusted on a tool presetter or in machining center.
- Adjusting range: ±0.1mm

High Speed

- Good for the boring operation on milling machines, machining centers and special purpose machines.
- Replaces solid carbide reamers.
- 99146 Series is Ideal For Casting Aluminum With Uncertain Pre-Hole Dimensions And Deviations In Hole Spacing.

9-142 Nine9 Cutting Tool & Tool Holders

Micro Spot Drill >>>

90° / 120° / 142°

0.1 & 0.2mm

It produces a consistent surface for micro drill successfully to enter the workpiece.

P M K N H

- One Holder Supports The Entire X060 Series Inserts.

Each Insert Has 2 Cutting Edges.

- Micro spot drill geometries are designed to optimize rigidity and accuracy with a point angle to guide micro drill towards the hole's central line.
- Carbide insert can stand very long tool life.
- It produces a consistent surface for micro drill to enter the workpiece especially for round, angled or curved surfaces.

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- Resulted off-center drilling, poor hole quality and reduced tool life.

Nine9 Cutting Tool & Tool Holders

SCAN QR Code To Access Mini Catalogues

